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EXAMINER				
PEARSON, DAVID J				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/774,560

**Applicant(s)**

KIM, YOUNG-HYUN

**Examiner**

DAVID J. PEARSON

**Art Unit**

2137

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SE/US)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

1. Claims 1, 4 and 8 have been amended. Claims 1-12 have been examined.

***Response to Arguments***

2. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1-2, 4 and 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harada et al. (U.S. Patent Application Publication 2003/0007640) and further in view of Horiuchi et al. (U.S. Patent Application Publication 2003/0009667) and Skinner (U.S. Patent Application Publication 2004/0202291).

For claim 1, Harada et al. teach a mobile communication terminal for providing mobile communication functions, for accessing a content server by at least one of wired and wireless communication, downloading content from the content server, and uploading the downloaded content to an external device, the mobile communication terminal comprising:

A memory for storing model information and a serial number of the mobile communication terminal (note paragraphs [0102]-[0103]) and the downloaded content (note paragraph [0105]);

A communication unit for providing mobile communication functions (note paragraph [0095]) and an interface for exchanging data with the external device (note paragraphs [0123]-[0125]);

An encryption unit for encrypting the serial number and the content with the encryption key (note paragraphs [0159]-[0165]);

A controller for uploading the encrypted content from the mobile communication terminal to the external device via the communication unit (note paragraph [0167]), and for transmitting a download request signal for the uploaded content to the external device in response to an input command (note paragraph [0169]); and

A decryption unit for decrypting, with the encryption key, the content downloaded from the external device in response to the download request signal for the uploaded content (note paragraph [0174]).

Harada et al. differ from the claimed invention in that they fail to specify:

A memory also for storing an encryption key for encrypting the content downloaded from the external device.

Horiuchi et al. teach:

A memory also for storing an encryption key for encrypting the content downloaded from the external device (note paragraphs [0109] and [0114]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the content storage device of Harada et al. with the memory card that generates an encryption key for the mobile terminal of Horiuchi et al. One of ordinary skill in the art at the time of the invention would have been motivated to combine Harada et al. and Horiuchi et al. because it would improve the security of transmitting data between the mobile device and the external device (note paragraph [0072] of Horiuchi et al.).

The combination of Harada et al. and Horiuchi et al. differ from the claimed invention in that they fail to specify:

An external device **which is not attached to the mobile communication terminal**.

Skinner teaches:

An external device **which is not attached to the mobile communication terminal** (note paragraphs [0042] and [0078]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the combination of Harada et al. and Horiuchi et al. and the wireless transmission of Skinner. It would have been obvious to substitute the wireless transmission of Skinner for the removable memory card of the Harada et al. and

Horiuchi et al. combination because it would yield the predictable results of transferring encrypted contents to a target device.

For claim 4, the combination of Harada et al., Horiuchi et al. and Skinner teaches a content security system comprising:

A mobile communication terminal for providing mobile communication functions (note paragraph [0091] of Harada et al.), for encrypting content provided from a content server (note paragraph [0165] of Harada et al.) with an encryption key provided from an external device (note paragraph [0109] of Horiuchi et al.) **which is not attached to the mobile communication terminal** (note paragraphs [0042] and [0078] of Skinner), and for uploading the encryption content from the mobile communication terminal to the external device (note paragraph [0167] of Harada et al.); and

An external memory device for generating the encryption key based on model information and a serial number of the mobile terminal (note paragraph [0103] of Harada et al.), and storing the encrypted content uploaded from the mobile communication terminal (note paragraph [0155] of Harada et al.).

For claim 8, the combination of Harada et al., Horiuchi et al. and Skinner teaches a content protection method using a content security system having a mobile communication terminal for providing mobile communication functions and downloading content from a content server and an external memory device for storing the content at a request of the mobile communication terminal, **the external memory device not**

**being attached to the mobile communication terminal** (note paragraphs [0042] and [0078] of Skinner), the method comprising the steps of:

Transmitting a content upload request signal from the mobile communication terminal to the external memory device in response to an input command (note paragraph [0181] of Harada et al.);

Transmitting to the external memory device model information and a serial number of the mobile communication terminal, requested by the external memory device in response to the content upload request signal (note paragraph [0103] of Harada et al.);

Encrypting content to be uploaded from the mobile communication terminal (note paragraph [0181] of Harada et al.) with an encryption key generated by the external memory device (note paragraph [0109] of Horiuchi et al.) based on the model information and the serial number (note paragraph [0103] of Harada et al.); and

Transmitting the content encrypted by the encryption key from the mobile communication terminal to the external memory device (note paragraph [0181] of Harada et al.).

For claim 2, the combination of Harada et al., Horiuchi et al. and Skinner teaches claim 1, wherein the encryption key is generated by the external device (note paragraph [0109] of Horiuchi et al.) based on the model information and the serial number of the mobile terminal (note paragraph [0103] of Harada et al.).

For claim 7, the combination of Harada et al., Horiuchi et al. and Skinner teaches claim 4, wherein the mobile communication terminal transmits a download request signal for previously uploaded content to the external memory device in response to an input command, and decrypts, with the encryption key, content downloaded from the external memory device in response to the download request signal (note paragraph [0184] of Harada et al.).

For claim 9, the combination of Harada et al., Horiuchi et al. and Skinner teaches claim 8, further comprising the steps of:

Determining whether the encrypted content uploaded from the mobile communication terminal is identical to the content encrypted by the encryption key (note paragraph [0307] of Harada et al.); and

Storing the encrypted content on the external memory device is the encrypted content uploaded from the mobile communication terminal is identical to the content encrypted by the encryption key (note paragraph [0319] of Harada et al.).

For claim 10, the combination of Harada et al., Horiuchi et al. and Skinner teaches claim 9, further comprising the steps of:

Upon receiving a download command from the previously uploaded content, transmitting a content download request signal from the communication terminal to the external memory device (note paragraph [0183] of Harada et al.);



If content index information for downloading is selected from content index information provided from the external memory device in response to the content download request signal, transmitting the selected content index information to the external memory device (note paragraph [0124] of Horiuchi et al.);

If encrypted content is downloaded from the external memory device according to the selected content index information, decrypting the downloaded encrypted content with the encryption key (note paragraph [0184] of Harada et al.).

4. Claims 3, 5-6 and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Harada et al., Horiuchi et al. and Skinner as applied to claims 2, 4 and 8 above, and further in view of Menezes et al. (Handbook of Applied Cryptography).

For claims 3, 5 and 11, the combination of Harada et al., Horiuchi et al. and Skinner differs from the claimed invention in that they fail to specify wherein the encryption key is generated by the external device considering further time information set in the external device.

Menezes et al. teach wherein the encryption key is generated by the external device considering further time information set in the external device (note pages 399-400, (iii) Timestamps).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the combination of Harada et al., Horiuchi et al. and Skinner with the time authentication of Menezes et al. One of ordinary skill in the art at the time of

the invention would have been motivated to combine Harada et al., Horiuchi et al., Skinner and Menezes et al. because it would provide timeliness and uniqueness guarantees to prevent replay message attacks (note page 399, (iii) Timestamps of Menezes et al.).

For claims 6 and 12, the combination of Harada et al., Horiuchi et al., Skinner and Menezes et al. teach claims 5 and 11, wherein the external memory device determines whether the time information set in the external memory device is identical to time information set in the mobile communication terminal, and generates the encryption key if the time information set in the external memory device is identical to time information set in the mobile communication terminal (note page 400, (iii) Timestamps, step 1 of Menezes et al.).

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Enari (U.S. Patent Application Publication 2002/0069127) teaches the use of Bluetooth for wireless transmission of data (note paragraph [0135]) when a memory card can not be used (note paragraph [0110]).

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID J. PEARSON whose telephone number is (571)272-0711. The examiner can normally be reached on Monday - Friday, 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2137

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DJP

/Emmanuel L. Moise/  
Supervisory Patent Examiner, Art Unit 2137